

Keswick  
Urban District Council

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ANNUAL REPORT

OF THE

Medical Officer of Health,  
Charles A. Mason, M.B., Ch.B., D.P.H.

---

FOR THE YEAR 1947.

---

Together with the Summary of Work  
of the Sanitary Inspector.

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## Keswick Urban District Council.

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TO THE CHAIRMAN AND MEMBERS OF THE  
KESWICK URBAN DISTRICT COUNCIL.

LADIES AND GENTLEMEN,

I have pleasure in presenting my Annual Report for 1947, which has been drawn up in accordance with Circular 1961 of the Ministry of Health, dated 16th February, 1940, and the Registrar-General's Memorandum SD/54, received June, 1948, as directed.

I am,

Ladies and Gentlemen,

Your obedient servant,

CHARLES A. MASON,

Medical Officer of Health.

# STATISTICS AND SOCIAL CONDITIONS OF THE AREA.

Area (acres), 1,272.

Registrar-General's estimate of resident population (mid 1947) 4,546 (see page 5)

Number of inhabited houses (end 1947), according to rate books, 1,469.

Rateable Value, £35,710.

Sum represented by a Penny Rate, £142 16s. 4d.

## EXTRACTS FROM VITAL STATISTICS OF THE YEAR.

	Total	M.	F.	
Live / Legitimate	76	37	33	} Live Birth Rate (R.G.) 16·7
Births \ Illegitimate	6	3	3	
Still Births	0	1 (legit.)	0	Still Birth Rate per 1,000 total (live and still) Births, 12·9

	Total	M.	F.	
Deaths	66	43	23	Crude Death Rate (R.G.) 14·5 per 1,000 of estimated resident population.

### Maternal Mortality :—

#### Deaths from Puerperal Causes (Childbirth) :

	Deaths.	Rate per 1,000 total (live and still) Births.
Puerperal Sepsis	0	nil.
Other Puerperal Causes	0	nil.
Total	0	nil.

### Infantile Mortality :

Deaths of Infants under 1 year of age	...	...	...	2
Death Rate „ „ „ „ (approx.) :—				
All infants per 1,000 live births	...	...	...	26
Legitimate infants per 1,000 legitimate live births	...	...	...	29
Illegitimate „ illegitimate „	...	...	...	nil.

Deaths from Measles (all ages)	...	...	0
„ Whooping Cough (all ages)	...	...	0
„ Diarrhoea (under 2 years of age)	...	...	0
„ Cancer	...	...	10



# KESWICK URBAN DISTRICT.

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## ANNUAL REPORT

### of the Medical Officer of Health

### for the year 1947.

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The area of the district in statute acres (land and inland water) is 1,272.

Social conditions and local industries remain as hitherto.

Meteorological Conditions :—These are shown in a report by Mr. Tom Wilson, Official Observer to the Meteorological Office and Air Ministry, and given at the end of this report.

## POPULATION.

For 1947, the figure given for the resident population of the district by the Registrar-General is 4,546, on which the birth and death rates and the incidence of notifiable diseases are based. (N.B.—Figures relating to non-civilians are excluded).

(The figure for 1946 was 4,527).

## PUBLIC ASSISTANCE.

In the Keswick Urban District, which is included in the Mid-Cumberland Guardians' area, the number of persons in receipt of out-door relief was 33, giving a proportion of (approximately) 1 in 138 of the population, as compared with 21 with a population of 1 in 216 in 1946.

One person was admitted to the Public Assistance Hospital from this district during the year, giving a percentage of 1 in 4,546 of the population, as compared with 1 in 4,527 in 1946.

Comparisons with 1946 :—

		Outdoor Relief.	Indoor Relief.
Keswick U.D.C.	1947	33	1
	1946	21	1

## VITAL STATISTICS—BIRTHS.

LIVE BIRTHS—There were 76 Live Births (40 males and 36 females) registered as belonging to the district : of these 6 (3 males and 3 females) were illegitimate.

The Live Birth Rate was accordingly 16·7 per 1,000 of the population, compared with 14·8 for the previous year.

Comparisons may be given as follows :—

Birth Rates, 1947—	Cumberland	...	...	...	22·0
	Rural Districts of Cumberland	..	..	..	21·4
	Urban Districts of Cumberland	..	..	..	22·9
	England and Wales	...	...	...	20·5
	Keswick Urban District	..	..	..	16·7

The percentage of Illegitimate Live Births was 7·8, as compared with 8·9 in 1946.

## CAUSES OF DEATH IN 1947.

CAUSES OF DEATH.							Males.	Females
ALL CAUSES							43	23
1.	Typhoid and Paratyphoid Fever						...	...
2.	Cerebro-Spinal Fever						...	...
3.	Scarlet Fever						...	...
4.	Whooping-cough						...	...
5.	Diphtheria						...	...
6.	Tuberculosis of Respiratory System						2	...
7.	Other Forms of Tuberculosis						...	...
8.	Syphilitic Diseases						...	...
9.	Influenza						...	...
10.	Measles						...	...
11.	Ac : Polio-myelitis and Polio-encephalitis						...	...
12.	Ac : inf : encephalitis						...	...
13.	Cancer of buc : cav : and œsoph : (M.) Uterus (F.)						...	...
14.	,, stomach and duodenum						3	...
15.	,, breast						...	1
16.	,, all other sites						4	2
17.	Diabetes						...	...
18.	Intra-cran : vase : lesions						5	3
19.	Heart Dis :						17	8
20.	Other Dis : of circulatory system						...	2
21.	Bronchitis						2	...
22.	Pneumonia (all forms)						2	...
23.	Other Respiratory Diseases						2	1
24.	Ulcer : of stomach or duodenum						...	...
25.	Diarrhœa under 2 years						...	...
26.	Appendicitis						...	1
27.	Other Digestive Diseases						1	1
28.	Nephritis						2	...
29.	Puerperal and post-abort : sepsis						...	...
30.	Other Maternal Causes						...	...
31.	Premature Birth						1	...
32.	Congen : malform : birth inj : infant dis.						...	...
33.	Suicide						...	...
34.	Road Traffic Acc :						...	...
35.	Other violent causes						1	1
36.	All other causes						1	3
Deaths of infants under 1 year of age—Total							2	...
Legitimate							2	...
Illegitimate							...	...

								Males	Females	
LIVE BIRTHS	{	TOTAL	...	...	...	...	...	40	...	36
		Legitimate	...	...	...	...	...	37	...	33
		Illegitimate	...	...	...	...	...	3	...	3
<hr/>										
STILL BIRTHS	{	TOTAL	...	...	...	...	...	1	...	
		Legitimate	...	...	...	...	...	1	...	
		Illegitimate	...	...	...	...	...		...	
<hr/>										
POPULATION (for Births and Deaths)—1947—R.G.							...	...	...	4,546

STILL BIRTHS.—There was one still birth registered, so that the still birth rate therefore, was '21 per 1,000 of the population, as compared with one still birth and a rate of '22 for 1946 (The rate for all England and Wales was 0'50).

The still birth rate per 1,000 total live and still births was 12'9, as compared with 14'7 in 1946.

## DEATHS.

The number of deaths registered as belonging to Keswick was 66 (1946—68). This gives a crude death rate of 14'5 per 1,000 of the population, as compared with 15'02 for the previous year. An Adjusting or Area Comparability Factor has not been provided by the Registrar-General for 1947, so the adjusted death rate (which no doubt would be lower) cannot be given.

Comparisons :—				Crude
Death Rates, 1947—Cumberland	...	...	...	13'8
Rural Districts of Cumberland			...	13'4
Urban Districts of Cumberland			...	14'3
England and Wales	...		...	12'0
Keswick Urban District			...	14'5

## INFANTILE MORTALITY.

There were two deaths (both legitimate) among infants under one year of age, so that the Infantile Mortality Rate was only 26'3 per 1,000 births, as compared with one death and a rate of 14'9 in 1946.

The causes of death were :—

Broncho-pneumonia (aet, 2 months).

Premature Birth (aet, 2 days).

The Illegitimate Infantile Mortality Rate per 1,000 illegitimate births, therefore, and the Legitimate Infantile Mortality Rate per 1,000 legitimate births were respectively nil and 28'7. These latter rates were nil and 16'3 for the previous year.

Comparisons may be given as follows :—

Infantile Mortality Rates, 1947 :—

Cumberland	...	...	...	42
Rural Districts of Cumberland			...	39
Urban Districts of Cumberland	...		...	46
England and Wales	...	...	...	41
Keswick Urban District (approx.)			...	26



## SENILE DEATH RATE.

48 persons had attained the age of 65 years or upwards. This number represents a Senile Death Rate of 72·7 per cent. of the total deaths, as compared with 76·4 for 1946.

Out of the total 48 deaths :—

11 ( 6m. 5f.)	persons died between the ages of 65 and 70 years.
9 ( 5m. 4f.)	„ „ „ „ 70 and 75 years.
14 (11m. 3f.)	„ „ „ „ 75 and 80 years.
10 ( 5m. 5f.)	„ „ „ „ 80 and 85 years.
3 ( 1m. 2f.)	„ „ „ „ 85 and 90 years.
1 (1f.)	„ „ at 91 years of age.

## INQUESTS, UNCERTIFIED DEATHS, AND VIOLENCE.

In respect of deaths belonging to the district during the year, there were three inquests. Inquests were held within the district in respect of 2 non-residents. One death was “Uncertified.”

No Coroner’s certificate was received of any case where post-mortem examination had been made, but no inquest held.

**VIOLENCE.**—The death rate due to Violence (all forms) was 0·43 per 1,000 of the population in the Keswick Urban District. Below will be seen the number of deaths from Suicide, Road Traffic Accident, Other Violence and the Total Violence Deaths, together with the percentages of the total deaths from all causes, and the death rates from each per 1,000 of the population :—

	Suicide.		Road Traffic Acc.		Other Violence excluding Road Traffic Acc.		Total Violence.	
	1947.	1946.	1947.	1946.	1947.	1946.	1947.	1946.
Deaths ...	nil.	nil.	nil.	nil.	2	1	2	1
% of all causes...	nil.	nil.	nil.	nil.	3·03	1·47	3·03	1·47
Death Rate per 1,000 population	nil.	nil.	nil.	nil.	·43	·22	·43	·22

The two violence deaths during the year were due as follows :—

Accidental fall downstairs (f. 73 years).

Accidental fracture of spine whilst diving (m. 22 years).

## CANCER.

Cancer proved fatal in 10 cases as follows :—

System.	Primary Organ.	Males.	Females.	Years.
Alimentary	... Oesophagus		1	70
	Stomach	3		59, 66, 81
	Bowel	1		67
	Rectum	1		75
Glandular	... Breast		1	43
	Prostate	2		65, 73
Other ...	... Vulva		1	78
Totals	...	7	3	

This number corresponds to a cancer death rate of 2·1 per 1,000 of the population, as compared with 8 deaths and a rate of 1·7 in 1946.

Approximately out of every 7 deaths of persons belonging to this district 1 was due to cancer (last year 1 in 9).

## TUBERCULOSIS.

(Vide also page 14).

There were 2 deaths due to Tuberculosis :—

		Males.	Females.
Respiratory System	...	2	0
Non-Pulmonary	...	0	0

(One previously notified within and one outside the district).

The Tuberculosis (all forms) death rate, therefore, was 0·43 per 1,000 of the population, as compared with one death and a rate of 0·22 for 1946.

The death rate for Tuberculosis of the Respiratory System was 0·43 per 1,000 of the population, as compared with nil for 1946.

## GENERAL PROVISION OF HEALTH SERVICES IN THE AREA.

### PUBLIC HEALTH STAFF.

1. Part-time Medical Officer of Health.
2. One Sanitary Inspector, Mr. J. Jenkins, who is also the Surveyor and Water Engineer, is a fellow of the Chartered Surveyors' Institute (by examination), and possesses the Sanitary Inspectors' Certificate and the Special Meat Inspectors' Certificate of the Royal Sanitary Institute.

Mr. R. Thompson continued to act as assistant in the Surveyor's office until the end of June when he left to take up another appointment. No successor to Mr. Thompson was appointed by the end of the year.

### LABORATORY WORK.

The following table shows the amount of work done in connection with the investigations of certain cases of illness by the Cumberland Laboratory, Carlisle, during the year 1947 :—

Material.	Examinations for :	Result :	
		Pos	Neg.
Throat or Nose Swabs	Diphtheria Bac., etc.	0	0
Sputum	Tubercle Bac.	1	6
Blood	Cell count, etc.	—	—

Speaking generally, other particulars relating to Health Services (e.g., Hospitals, Nursing, Maternity, Ambulance Facilities, etc.), remain unchanged.

## SANITARY CIRCUMSTANCES OF THE AREA.

### WATER SUPPLY.

The town's water supply has been generally satisfactory.

With the exception of 8 houses at High Briery, where there is a standpipe, all premises have a piped supply.

Six samples of the raw water were submitted for examination. All proved excellent in quality.

In view of the very soft character of the water and the liability of plumbo-solvency, lead pipes are not used. Galvanised iron and copper service pipes are used for domestic purposes.

When new mains are laid, concrete-lined pipes are used so as to prevent incrustation, though the water, of course, is not affected.

Chlorination was continued during the year.

WATER MAINS.—No major extension was made during the year.

### DRAINAGE AND SEWERAGE.

No extensions were carried out in 1947. The Surveyor informs me the sewerage effluent from the Outfall Works continued to be satisfactory. The sludge was again used by farmers and the local Allotment and Gardeners' Association.

Closet Accommodation—Unchanged.

### SCAVENGING AND REMOVAL OF REFUSE.

The method of scavenging and removal of refuse proceeds as formerly.

The surface of the refuse tip field has been levelled by means of a "calf-dozer" with satisfactory results.

### SANITARY INSPECTION OF THE DISTRICT.

The sanitary inspection of the district is undertaken by Mr. J. Jenkins, who is also the Council's Surveyor and Water Engineer. It is again a pleasure to record my appreciation of his ever-willing co-operation, and I gratefully acknowledge his invaluable assistance in the making of this report.

Summary supplied by the Sanitary Inspector to the Medical Officer of Health, in pursuance of Article XIX of the Sanitary Officer's Order, 1926.

Premises inspected during the year	...	...	156
Nuisances or defects discovered	...	...	142
Do. do. remedied after informal notice	...	...	135
Do. do. do. statutory notice	...	...	7
Housing Inspections under Public Health or Housing Acts			94
Factories Inspections	...	...	35



### FACTORIES ACT, 1937.

The following table shows the position in this district at the end of 1947, and it will be seen that 23 premises were still on the register, and 35 inspections by the Sanitary Inspector revealed 7 defects, all of which were then remedied.

Premises.	Number.	Inspec- tions.	Defects Found.	Written Notices.	Defects Remedied.	Prose- cutions.
Factories with mech. power ...	7	15	3	3	3	—
Factories without mech. power ...	16	20	4	4	4	—
Other Premises under the Act ...	—	—	—	—	—	—
Totals ...	23	35	7	7	7	0

### SHOPS ACT, 1934.

No change. Periodical Inspections were made by the Sanitary Inspector.

### RATS AND MICE DESTRUCTION ACT, 1919.

The Sanitary Inspector has been the responsible officer under the Act since the County Council delegated its powers to the District Council. Every assistance is afforded to rid premises of the rat menace. The refuse tip continues to have special attention in this respect, with good results.

### HOUSING.

The position regarding renovation and repair work generally remains difficult.

The 8 single-storey houses erected for occupation by aged persons were completed and occupied by the end of the year. Six of these houses have two bedrooms and two have one bedroom each.

The occupants were carefully chosen.

These houses have helped to solve a decided want and are very much appreciated by the old people, who are proving themselves to be very worthy tenants.

During the year 26 of the 40 houses scheme were completed, leaving 16 still under construction (the remaining 8 were completed in the preceding year). Thirteen private enterprise houses were erected and occupied during 1947.

Plans were prepared for another 24 houses. These houses are under erection at the time of writing and are, in fact, well forward.

142 Licences were granted for work in connection with existing houses (£6306).

86 Licences were granted for work in connection with buildings other than houses (£3931).

3 Licences were granted for the erection of private enterprise houses.

### HOUSING APPENDIX

(Ref. Circular 1728 Ministry of Health, 25th October, 1938).



## STATISTICS.

## 1.—Inspection of Dwelling-houses during the year :—

(1) (a) Total number of dwelling-houses inspected for housing defects (under Public Health or Housing Acts) ...	126
(b) Number of inspections made for the purpose ...	152
(2) (a) Number of dwelling-houses (included under sub-head (1) above) which were inspected and recorded under the Housing Consolidated Regulations, 1925 and 1932 ...	0
(b) Number of inspections made for the purpose...	0
(3) Number of dwelling-houses found to be in a state so dangerous or injurious to health as to be unfit for human habitation ...	0
(4) Number of dwelling-houses (exclusive of those referred to under the preceding sub-heading) found not to be in all respects reasonably fit for human habitation ...	0

2.—Remedy of defects during the year without service of Formal Notices : Number of defective dwelling-houses rendered fit in consequence of informal action by the Local Authority or their Officers ...	110
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## INSPECTION AND SUPERVISION OF FOOD.

There were seven registered milk-sellers whose premises were within the Urban District, six of these being producers and retailers. Inspections continue to be made periodically.

A large quantity of the town's milk supply is retailed by producers and retailers whose premises are situated in the surrounding Rural District. There were 9 of such producers and retailers during 1947.

The table below gives the results of 26 samples of milk retailed in the town and taken during 1947 by the Sanitary Inspector and submitted for bacteriological examination to the Cumberland Pathological Laboratory, Carlisle.

Of the 26 samples, 15 were satisfactory and 11 unsatisfactory in relation to dirt contamination, as follows :—

	Satisfactory according to Accredited Standards.	Unsatisfactory according to Accredited Standards.	Total
Samples produced in Urban District	9	2	11
„ „ outside „	6	9	15
	<hr/> 15	<hr/> 11	<hr/> 26

Of the 11 unsatisfactory samples 5 failed to pass both the Methylene Blue Reduction and B Coli Tests, whilst 6 failed in the Methylene Blue Test alone.

One of the samples tested for the presence of Tubercle Bacilli proved positive ; investigations resulted in the slaughtering of a cow found to be suffering from udder-tuberculosis ; further testing proved negative.

On a sample of milk being reported as tubercular, investigation is made by veterinary officials of the Ministry of Agriculture and Fisheries.

I am indebted to Mr. John Reid, Divisional Inspector of that Authority, for the following return of particulars of animals slaughtered under the Tuberculosis Order, 1938, from premises registered in the Keswick Urban District during the year 1947 :—

Total number of animals slaughtered	...	...	1
Cows in milk	...	...	1
Other cows or heifers	...	...	0
Other bovine	...	...	0
Types of Disease found at post-mortem :—			
Tuberculosis of udder	...	...	1
„ with emaciation	...	...	0
„ with chronic cough and showing definite clinical signs	...	...	0

The only milk (Accredited) under “Special Designation” produced in the Keswick Urban District was by Mr. Martin Raven, High Hill Farm, who is also a large retailer.

### MEAT AND OTHER FOODS.

SLAUGHTER-HOUSES.—No change from preceding year. Offal from the Slaughter-Houses and wet Fish Shops takes the form of a daily collection and is disposed of by the Council who make a small charge.

The following is a summary of foodstuffs for which condemnation certificates were issued by the Sanitary Inspector because of disease or putrifaction, etc.

(a) BUTCHER MEAT :—	lbs.
5 Ox carcasses (Tubercular)	2700
1 Ox carcase (Erysipelas)	210
1 Ox carcase (Inflammation)	290
1 Ox carcase (Ill-bled)	370
1 Ox carcase (Emaciation)	307
1 Ox carcase (Carcinoma)	320
Offals	809
2 Calf carcasses (Emaciation)	80
Offals	14
1 Lamb carcase (Dropsy)	16
Offals	4
9 Sheep carcasses (Emaciation 7) (T.B. 1) (ill-set 1)	270
197 Ox Livers (Cirrhosis)	2325
Sheep Offals	69
Part Ox Livers (Cirrhosis)	48
146 Sheep Livers (Cirrhosis)	280
2 Cows' Udders	10
17 Sheep Plucks	58
8 Sheep Heads	27
1 Ox Heart (Endocarditis)	4
2 Ox Tripes	30
3 Ox Lungs	32
1 Ox Tail	2
2 Hind Quarters (Beef)	180
Imported Beef	343
	<hr/>
	8798

3 tons, 18 cwts., 2 qrs., 6 lbs.

(b) FISH :—

40 Stone.

(c) OTHER FOODS :—

14lbs. Butter ; 23 tins Milk ; 38lbs. Bacon ; 18 tins Peas ; 7 tins Mac. Cheese ; 1 tin Irish Stew ; 6½lbs. Chocolate : 1 tin Armour's Veal Soup ; 34lbs. Tripe ; 3 tins of Fruit ; 4 tins of Carrots ; 336 Fruitella Table Dessert (packets) ; 18 tins of various other Foodstuffs.

BAKEHOUSES.—There are six in existence, the same as in the previous year ; periodical inspections were made, four informal notices were necessary and readily complied with. There is still a need for more commodious premises in two cases, either by reconstruction works or alternative sites. These cases are having attention.

# PREVALENCE OF, AND CONTROL OF, INFECTIOUS DISEASES.

**NOTIFIABLE INFECTIOUS DISEASES.**—The total number of Infectious Diseases notified during 1947 in the Keswick Urban District, including Pulmonary and Other Forms of Tuberculosis was only 16. Excluding Measles and Whooping Cough (*vide post*) the number was 6 (the figure in 1946 being 6). Three of these were notifications of Tuberculosis.

## NOTIFIABLE DISEASES, 1947.

Disease.	Total Cases notified	Cases notified 1947 admitted to Hospital.	Deaths
Measles ... (Age 4 years).	1	0	0
Erysipelas ... (Age 43 years).	1	0	0
Whooping Cough ... (Ages—under 1 yr., 1 ; 3—4 yrs., 2 ; 4—5 yrs., 4 ; 5—10 yrs., 2).	9	0	0
Puerperal Pyrexia ... (Age 30).	1	0	0
Acute Poliomyelitis ... (Age 14 years).	1	1	0
Tuberculosis :—			
Pulmonary { Males ...	2	1 (San.)	0
{ Females ...	0	0	0
Non-Pulmonary { Males ...	1	1 (Hosp.)	0
{ Females ...	0	0	0

Table showing monthly incidence of Notifiable Diseases, 1947 :—

[illegible]



From notifications received it is deducted that approximately one in every 758 persons in this district contracted a disease notifiable under the Infectious Diseases Notification Act (Chicken-pox, Measles and Whooping Cough excluded) and the Tuberculosis Regulations. (Last year's figure, 1 in 905 and in 1928 it was 1 in 177).

There were no notifications of either Scarlet Fever or Diphtheria, so that the case rates and death rates of each, respectively, were nil, these rates for England and Wales (1947) being Scarlet Fever, 1·37 and 0·0, and Diphtheria 0·13 and ·01.

The immunisation campaign against Diphtheria was continued as before (again entailing a considerable amount of unseen work). Inoculations were given at the Crosthwaite Parish Room after advertising, etc. as previously. During the year under review, 2 elementary school children, 5 to 14 years, and 23 infants under 5 years were given primary injections (two at intervals of a few weeks) by me personally, i.e., officially.

69 children received a single re-inforcing dose (these are children who received the two primary doses 4 to 5 years previously).

I have again had the welcome co-operation of the local medical practitioners, head teachers, the District Nurses and, particularly, that of the County Health Visitor, Miss Horn.

One case of Puerperal Pyrexia was recorded (the first notification received by me here for 16 years). The case rate for this disease (including Puerperal Fever) is better expressed in relation to the number of births registered than to the population. When calculated on this basis the rate is:—Puerperal Pyrexia, 12·9 per 1,000 total births (i.e., live and still births) registered during the year. The corresponding rate (1947) for England and Wales was 7·16. Again no maternal death occurred—corresponding, therefore, to a Maternal Mortality Rate of nil per 1,000 total (live and still) births, the same as in 1946.

**PNEUMONIA.**—No notification was received; two deaths were registered from Pneumonia (all forms).

There were no notifications of Cerebro-Spinal Meningitis and, similar to the previous year, there were none of Typhoid (including Para-Typhoid) Fever, Encephalitis Lethargica, or Ophthalmia Neonatorum.

During 1947, as there was an epidemic of Acute Poliomyelitis throughout the Country, it was expected that Keswick would get its share, being a holiday resort with so many visitors from far and near; however, only one case was recorded in the town—a boy of 14 years (and resident) with eventual recovery: he was removed to Crozier Lodge Hospital, Carlisle, to which all such cases were sent in this County under arrangement made by the County Medical Officer in view of the special and necessary facilities provided there.

**TUBERCULOSIS.**—Under the Tuberculosis Regulations, two cases (both m.) of Pulmonary were notified, and one case of Other Forms of Tuberculosis.

This number excludes two transfers inward from H.M. Forces and elsewhere, viz.: 1 male and 1 female, pulmonary.

Two cases were admitted to Sanatorium during the year (1 m. and 1 f. pulm.)



The following table gives the number of New Cases and Mortality (all cases) during 1947 :—

Age.	New Cases.				Deaths.			
	Respiratory.		Non-Respiratory.		Respiratory.		Non-Respiratory.	
	M.	F.	M.	F.	M.	F.	M.	F.
Under 1 year ...	...	...	...	...	...	...	...	...
1—5 ...	...	...	...	...	...	...	...	...
5—10 ...	...	...	...	...	...	...	...	...
10—15 ...	...	...	1	...	...	...	...	...
15—20 ...	...	...	...	...	...	...	...	...
20—25 ...	...	1	...	...	...	...	...	...
25—35 ...	1	...	...	...	...	...	...	...
35—45 ...	...	...	...	...	...	...	...	...
45—55 ...	...	...	...	...	...	...	...	...
55—65 ...	...	...	...	...	2	...	...	...
65 and upwards ...	...	...	...	...	...	...	...	...
Totals ...	1	1	1	0	2	0	0	0

A statement regarding the total deaths from Tuberculosis will be found on page 8.

The number of cases on the Tuberculosis Register at the end of 1947 was as follows :—

	Males.	Females.	Total.
Pulmonary ...	17	4	21
Non-Pulmonary	3	3	6
All Cases ...	20	7	27

No action has been required to be taken under the Public Health (Prevention of Tuberculosis) Regulations, 1925, which relates to powers regarding persons suffering from Tuberculosis of the respiratory tract, and in an infectious state and employed in connection with a dairy or the handling of milk or milk vessels.

With reference to the Public Health Act, 1925, Section 62, regarding compulsory removal to hospital or institution, no action has been taken.

NON-NOTIFIABLE ACUTE INFECTIOUS DISEASES.—Epidemics usually occur in conjunction with epidemics in the districts adjoining.

Influenza was only present to a slight extent and no death was attributed to this disease, so that the influenza death rate was nil per 1,000 of the population, as compared with '22 (one death) in 1946. (The rate, 1947, for England and Wales was 0·09).

Re Measles and Whooping Cough (which became notifiable as from 1st November, 1939).—There was one case of Measles notified (in December), but 9 Whooping Cough notifications were received (8 in Oct. and 1 in Nov.)

The case rates of Measles and Whooping Cough (as per notifications) were therefore, respectively, 0·20 and 1·97 per 1,000 of the population, as compared with 9·41 and 2·22 for all England and Wales.

No death occurred from either Measles or Whooping Cough (as in the previous year), so that the death rates were again nil per 1,000 of the population, respectively, as compared with 0·01 and 0·02 for England and Wales, 1947.

There were no school closures due to epidemic diseases during the year.

## METEOROLOGICAL STATION.

Height above sea level, 254 ft. Lat. 54° 36' N. Long. 3° 9' W.

## RETURNS FOR 1947.

Month.	RAINFALL.			SUNSHINE.		
	Amount. Inches.	Days.	Greatest fall on one day.	Average 45 years.	Amount. Hours.	Aver. Days. 45 yrs.
January	... 7.05 on 17	...	1.40 on 16th	... 6.37	... 34.5 on 16	... 34.7
February	... 1.26 on 10	...	.43 on 25th	... 4.54	... 47.7 on 15	... 53.4
March	... 5.48 on 19	...	.73 on 16th	... 3.94	... 68.5 on 18	... 98.9
April	... 11.86 on 22	...	2.90 on 21st	... 3.13	... 91.2 on 20	... 128.9
May	... 3.34 on 18	...	.49 on 13th	... 3.25	... 151.4 on 26	... 177.5
June	... 3.15 on 16	...	.49 on 16th	... 3.23	... 129.5 on 23	... 179.5
July	... 3.54 on 17	...	.52 on 16th	... 4.26	... 113.3 on 24	... 155.0
August	... .02 on 1	...	.02 on 1st	... 5.01	... 303.8 on 29	... 142.6
September	... 5.24 on 19	...	1.03 on 30th	... 4.64	... 100.6 on 27	... 115.7
October	... .90 on 10	...	.20 on 14th	... 6.49	... 87.8 on 22	... 79.4
November	... 10.11 on 16	...	1.48 on 11th	... 5.56	... 56.0 on 18	... 27.9
December	... 3.10 on 17	...	.52 on 27th	... 6.37	... 16.3 on 6	... 25.9
Totals	... 55.05	..., 182		56.97	1190.7	..., 244 1225.2

## TEMPERATURES.

Month.	HIGHEST MAXIMUM (in screen).	LOWEST MINIMUM (in screen).	LOWEST MINIMUM (on grass).	Nights Frost.	Wind at Gale Force.	Snow Lying.
Jan.	... 53.0 on 14th	... 15.0 on 30th	... 15.0 on 30th	... 20	... 1	... 2
Feb.	... 43.0 on 4th	... 13.0 on 23rd	... 10.0 on 23rd	... 28	...	... 26
Mar.	... 57.0 on 28th	... 6.0 on 1st	... 3.0 on 1st	... 17	...	... 20
April	... 59.0 on 12th	... 30.0 on 3rd	... 21.0 on 2nd	... 8	... 3	...
May	... 80.0 on 31st	... 34.0 on 2nd	... 29.0 on 2nd	... 1	...	...
June	... 83.0 on 2nd	... 39.0 on 16th	... 33.0 on 16th	...	...	...
July	... 78.0 on 31st	... 44.0 on 9th	... 39.0 on 9th	...	...	...
Aug.	... 83.0 14, 16, 18...	... 50.0 11, 22, 25...	... 37.0 on 24th	...	...	...
Sept.	... 74.0 on 1st	... 31.0 on 30th	... 30.0 on 30th	... 1	...	...
Oct.	... 69.0 on 3rd	... 37.0 on 31st	... 31.0 on 21st	...	...	...
Nov.	... 60.0 on 1st	... 20.0 on 28th	... 15.0 on 28th	... 15	...	...
Dec.	... 53.0 on 24th	... 20.0 on 1st	... 14.0 on 1st	... 9	...	... 3
Totals				99	4	51

Month.	Calm.	WIND.				EARTH TEMPERATURES.			
		North Quad- rant.	South Quad- rant.	East Quad- rant.	West Quad- rant.	High- est. 1 ft.	Low- est. 1 ft.	High- est. 4 ft.	Low- est. 4 ft.
January ...	10	1	12	4	4	43·6	34·6	44·1	39·3
February ...	6	1	2	19	—	35·0	33·0	44·0	42·5
March ...	9	4	10	8	—	41·5	33·0	41·5	37·0
April ...	2	1	20	3	4	46·5	38·0	43·5	38·5
May ...	8	4	15	3	1	61·0	44·3	50·1	43·5
June ...	7	1	12	3	7	61·6	56·3	53·6	49·8
July ...	12	2	8	1	8	64·4	56·7	57·0	53·7
August ...	19	1	5	3	3	66·0	62·0	58·7	57·2
September ...	10	3	9	—	8	62·6	52·9	58·6	56·6
October ...	15	1	9	2	4	55·5	48·2	56·6	53·4
November ...	13	2	4	—	11	51·0	38·0	53·2	49·0
December ...	12	2	2	6	9	45·2	36·3	48·5	45·7
Totals ...	123	23	108	52	59				

#### ABNORMAL PRECIPITATION.

Nov. 2nd and 3rd, 1931, 6·16 inches in 36 hours.

November 3rd, 1931, 4·86 „

November 12th, 1936, 3·27 „

November 4th, 1926, 3·32 „ in 9½ hours.

December 24th, 1925, 3·50 „

August 2nd, 1923, 3·00 „

July 13th, 1932, 2·56 „ in 5 hours.

December 2nd, 1902, 3·12 „

Continuous snow for 3 days, February 18th, 19th and 20th, 1941. 15 inches.

#### SUNDRY NOTES.

Thunder heard, 12 days.

Lightning observed, 9 days.

Thunderstorm with Precipitation, 8 days.

More than 1 inch of rain fell on 12 days.

More than 2 inches of rain fell on 2 days.

Visibility less than 1,100 yards on 2 days.

Warmest days, 83·0 degrees on July 2nd, and August 14th, 16th and 18th.

Warmest nights, 63·0 degrees on June 1st & Aug. 2nd.

Coldest day, 6·0 degrees on March 1st.

Coldest night, 3·0 degrees on March 1st.



## THE WEATHER OF 1947.

The weather of 1947 will long be remembered. The early months were very severe, and arctic conditions prevailed until the end of March.

During April, heavy rain, melted snow from the hills, and the failure of responsible bodies to realise that interference with flood water courses can have serious consequences, led to a flood which caused much inconvenience and much damage at the lower part of the town.

A long spell of dry weather commenced at the end of July and continued until September 6th. During these 40 days only .02 inches of rain were measured, resulting from a slight shower on August 2nd.

The long drought was to have far-reaching results in many northern towns and local villages. In Keswick the water supplies were maintained without apparent inconvenience to the people of the town and record crowds of visitors.

Another dry spell was experienced in November. This gave way to an early spell of winter with severe frost.

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|----------|--|
| JANUARY  | A mixed month. Snow, frost, and a flood in the first half<br>Fine and frosty in the last fortnight.  |
| FEBRUARY | Snow fell early and often. Frost almost every day. Lakes and<br>rivers frozen. Skating, toboganing and curling. Snow lay from<br>February 3rd to March 19th. |
| MARCH    | Winter continues. Temperature on grass down to 3'0 degrees<br>on 1st. Snowfalls frequent.  |
| APRIL    | Heavy rain on 5th, also on 20th to 24th, with gales and floods.<br>River Greta overflowed at High Hill ; growing crops washed<br>from fields.                |
| MAY      | Showery and cold. Improving as month proceeds.   |



- JUNE Showery, with fluctuating temperatures ; improvement maintained.
- JULY Showery and warmer.
- AUGUST A record month. The only rain throughout the month being a slight shower on the 2nd (·02). Bright sunshine totals 303·8 hours, the most for any month since the records have been kept. On eight consecutive days Maximum in screen recorded over 80 degrees. For nearly 14 days no cloud was seen in the sky. Heather on the hills which, owing to the long and severe winter, appeared to be dead, suddenly burst into bloom, making a splendid show on the hills to the delight of visitors in general, and local Bee-keepers in particular.
- SEPTEMBER After the continuance of the drought in the first week, the rest of the month was showery.
- OCTOBER Fine and dry. A splendid autumn painted in vivid colours, with plenty of fine days to enjoy it.
- NOVEMBER A sufficiency of rain in two wet spells. A wintry week as the month ended. Severe.
- DECEMBER Started with frost ; skating on the tarns. Showery, with many fine, though cloudy, days. The month, and the year, ended with a covering of snow. Snowdrops were in bloom, having pushed themselves through the frozen ground in time to make good resolutions for, and to wish everyone a Happy and Sunny New Year.

TOM WILSON, Observer to Meteorological Society.





